



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,213	12/07/2005	Max De Groot	032326-296	8823
21839 7590 09/17/2009 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				
EXAMINER TORRES, MARCOS L				
ART UNIT 2617		PAPER NUMBER		
NOTIFICATION DATE 09/17/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary

Application No.

10/529,213

Applicant(s)

DE GROOT, MAX

Examiner

MARCOS L. TORRES

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6-26-09 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites that applying the random number to an asymmetric algorithm and on the next line recite that executing the asymmetrical algorithm produces the random number. It is unclear if they are two different random

Art Unit: 2617

numbers or if the second line the random number is reproduced [note that the claim require to have the random number before the execution of asymmetrical algorithm].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aura 6373949 in view of Owada 20020034306.

As to claim 1, Aura discloses a process to identify a user of the terminal resource by a server resource in a telecommunication network, using a first identifier, where an encryption algorithm with a key is implemented in the terminal resource (see col. 3, line 54 – col. 4, line 5), comprising the following steps: generating a random number in the user terminal resource (see fig. 5, step 501); determining in the terminal resource of a second identifier as a function of the random number, at least from part of the first

identifier and from the result of executing the encryption algorithm to which at least the random number is applied (see fig. 5, items 502-503) transmitting the second identifier to the server resource, and in the server resource, retrieval of retrieving the first identifier at least by executing the encryption algorithm to which a key and, at least partially, the second transmitted identifier are applied, so that the server resource verifies that the first retrieved identifier is written into a memory of the server resource (see fig. 5, items 505-506; col. 4, line 36 – col. 5, line 50). Aura does not specifically disclose using both symmetrical and asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claim 2, Aura discloses a process in which the at least one authentication further including the step of authenticating the terminal resource by the server resource (see fig. 5, items 505-506).

As to claim 3, Aura discloses a process to identify a user of the terminal resource by a server resource in a telecommunication network, using a first identifier, where an encryption algorithm with a key is implemented in the terminal resource (see col. 3, line 54 – col. 4, line 5), comprising the following steps: generating a random number in the

user terminal resource (see fig. 5, step 501); determining in the terminal resource of a second identifier as a function of the random number, at least from part of the first identifier and from the result of executing the encryption algorithm to which at least the random number is applied (see fig. 5, items 502-503) a process in which the determination in the terminal resource includes application of the generated random number to the encryption algorithm with the public key to produce an encrypted random number, application of the generated random number and of the first identifier to encryption algorithm implemented in the terminal resource, to produce an encrypted identifier, and concatenation of the encrypted random number and of the encrypted identifier in the second identifier; transmitting the second identifier to the server resource, and in the server resource, retrieval of retrieving the first identifier, and wherein the retrieval in the server resource includes application of the encrypted random number to the encryption algorithm with the key, in order to retrieve the generated random number, and application of the retrieved random number, and of the encrypted identifier to the encryption algorithm, in order to retrieve the first identifier , so that the server resource verifies that the first retrieved identifier is written into a memory of the server resource (see fig. 5, items 501-506; col. 4, line 36 – col. 5, line 50). Aura does not specifically disclose using both symmetrical and asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been

obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claim 4, Aura discloses a process to identify a user of the terminal resource by a server resource in a telecommunication network, using a first identifier, where an encryption algorithm with a key is implemented in the terminal resource (see col. 3, line 54 – col. 4, line 5), comprising the following steps: generating a random number in the user terminal resource (see fig. 5, step 501); determining in the terminal resource of a second identifier as a function of the random number, at least from part of the first identifier and from the result of executing the encryption algorithm to which at least the random number is applied (see fig. 5, items 502-503); wherein the determination in the terminal resource includes application of the generated random number concatenated to the first identifier, to the asymmetrical algorithm with the public key to produce the second identifier, transmitting the second identifier to the server resource, and in the server resource, retrieval of retrieving the first identifier wherein the retrieval in the server resource includes application of the second identifier to the cyber algorithm with the key in order to retrieve the first identifier, so that the server resource verifies that the first retrieved identifier is written into a memory of the server resource (see fig. 5, items 501-506; col. 4, line 36 – col. 5, line 50). Aura does not specifically disclose using both symmetrical and asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the

use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claim 5, Aura discloses everything as explained above except for the process further including the steps of changing the public key and the private key for the asymmetrical algorithm in the server resource, and downloading of the changed public key from the server resource to the terminal resource. Owada discloses process further including the steps of changing the public key and the private key for the asymmetrical algorithm in the server resource, and downloading of the changed public key from the server resource to the terminal resource (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claim 6, Aura discloses a process wherein the generation of the random number is periodic (recurring, repeated) in the terminal resource (see col. 5, lines 46-50).

As to claim 7, Aura discloses a process wherein the generation of the random number occurs following activation of a service application (transfer of subscriber identity, col. 4, lines 25-51).

As to claim 8, Aura discloses a user terminal resource identifying itself, or identifying a user of the latter, to a server resource, through a telecommunication

network using a first identifier, an encryption algorithm with a key implemented in the terminal resource, comprising: a resource to generate a random number (see fig. 5, item 501), and a resource, to determine a second identifier as a function of the random number, at least from part of the first identifier and from the result of executing the encryption algorithm to which at least the random number is applied in order to transmit the second identifier to the server resource (see fig. 5, items 502-503), which retrieves the first identifier at least by executing the encryption algorithm to which a key and, at least partially, the second identifier are applied, and which verifies that the first retrieved identifier is written into a memory of the server resource (see fig. 5, items 505-506; col. 4, line 36 – col. 5, line 50). Aura does not specifically disclose using both symmetrical and asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claim 9, Aura discloses a user terminal resource which wherein the resource to generate a random number and the resource to determine a second identifier are included in a portable electronic object of the chip card type (see col. 4, lines 48-51).

As to claim 10, Aura discloses method for identifying at least one of a terminal and a user of the terminal to a server in a telecommunications network, comprising the following steps: generating a random number in the terminal (see fig. 5, item 501); applying said random number and a first identifier associated with said terminal to at least one cyber algorithm in said terminal, using a key, to generate a second identifier that is based upon a combination of said random number and said first identifier (see fig. 5, item 502-503); transmitting said second identifier to said server; applying said second identifier to said cyber algorithm in said server, using a key, to derive said first identifier; and authenticating said terminal or said user in the server, using the derived first identifier (see fig. 5, items 505-506; col. 4, line 36 – col. 5, line 50). Aura does not specifically disclose using both symmetrical and asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claims 11, Aura discloses the method wherein said random number is applied to said cyber algorithm in said terminal, together with said key, to generate a first result (see fig. 5, item 502), and said first identifier is applied to a second, symmetric (related) algorithm in said terminal, together with a key, to generate a second

result, and wherein said second identifier comprises a combination of said first and second results (see fig. 5, item 503). Aura does not specifically disclose using both symmetrical and asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claim 13, Aura discloses the method wherein said second identifier comprises a concatenation of said first and second results (see fig. 5, items 502-503).

As to claim 14, Aura discloses the method wherein said random number is combined with said first identifier, and the combination of said random number and said first identifier is applied as an input to said cyber algorithm in said terminal, together with said key, to generate said second identifier (see fig. 5, items 502-503). Aura does not specifically disclose using asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

As to claim 15, Aura discloses the method wherein said combination comprises a concatenation of said random number and said first identifier (see fig. 5, items 502-503).

As to claim 16, Aura discloses the process in the server resource, further comprising: applying the random number to an algorithm to produce an identity of the terminal resource, wherein executing the algorithm produces the random number(see fig. 5, step 501-506). Aura does not specifically disclose using asymmetrical algorithm. However, note that two keys are being used one for encrypting and the other for decrypting. In an analogous art, Owada discloses using an asymmetrical algorithm with a public key and a symmetric algorithm with the use of random number (see par.0037, 0043-0046), thereby using a public and private keys. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use the combination of algorithms to prevent the unauthorized eavesdropping or use of the information (see par. 0054).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCOS L. TORRES whose telephone number is (571)272-7926. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-252-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/Marcos L Torres/
Examiner, Art Unit 2617